

What is claimed is:

1. A system for making a leavened food product from a dough having a leavening agent that can produce carbon dioxide, the system comprising:
  - a carbon dioxide sensor for detecting the carbon dioxide produced by the leavening agent and for providing an output indicative of the carbon dioxide produced; and
  - a monitor connected to the carbon dioxide sensor for providing a signal based on input from the carbon dioxide sensor.
2. A system as set forth in claim 1, wherein the monitor is configured to provide an indication of the amount of carbon dioxide.
3. A system as set forth in claim 1, wherein the monitor is configured to provide an indication of the rate of carbon dioxide production.
4. A system as set forth in claim 1, further comprising a container within which the dough is placed, the carbon dioxide sensor being exposed to the atmosphere within the container.

5. A system as set forth in claim 4, wherein the sensor is mounted within the container.

6. A system as set forth in claim 4, further comprising a temperature sensor connected to the container for measuring the temperature in the container and for providing an output indicative of the temperature.

7. A system as set forth in claim 6, wherein the temperature sensor is connected to the indicator for providing an output in response to the input from the temperature sensor.

8. A system as set forth in claim 6, wherein the temperature sensor is a thermometer.

9. A system as set forth in claim 6, wherein the temperature sensor is a thermocouple.

10. A system as set forth in claim 6, wherein the temperature sensor is a thermistor.

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11. A system as set forth in claim 6, wherein the temperature sensor is an infrared (IR) detector.
12. A system as set forth in claim 4, wherein the container includes an oven.
13. A system as set forth in claim 4, wherein the container includes a proofing oven.
14. A system as set forth in claim 1, wherein the monitor includes a controller interconnecting the carbon dioxide sensor and the indicator, the controller controlling the indicator in response to data received from the carbon dioxide sensor.
15. A system as set forth in claim 14, further comprising a temperature sensor connectable to the controller and a temperature regulator connected to and controlled by the controller, the controller controlling the temperature regulator in response to data received from the carbon dioxide sensor and the temperature sensor.

16. A system as set forth in claim 14, further comprising a humidity sensor connectable to the controller and a humidity regulator connected to and controlled by the controller that regulates the humidity, the controller controlling the humidity regulator in response to data received from the carbon dioxide sensor and the humidity sensor.

17. A system as set forth in claim 14, wherein the controller includes a digital signal processor.

18. A system as set forth in claim 14, wherein the controller controls the time and the temperature for baking the dough to produce the leavened food product based on input from the carbon dioxide sensor.

19. A method of making a leavened food product, including mixing ingredients that include a leavening agent to form a dough, comprising:

detecting and monitoring the carbon dioxide produced by the leavening agent; and

controlling further processing of the dough based on the production of carbon dioxide by the leavening agent.

20. A method as set forth in claim 19, wherein monitoring includes signaling a transition from an active stage of increasing carbon dioxide production to a stable stage of relatively constant carbon dioxide production.

21. A method as set forth in claim 19, wherein controlling further processing includes automatically controlling baking of the dough based on the production of carbon dioxide.

22. A system for making a leavened food product from a dough having a leavening agent that can produce carbon dioxide, the system comprising:  
means for monitoring the carbon dioxide produced by the leavening agent  
and for providing an output indicative of the carbon dioxide produced; and  
means for providing an output based on input from the means for monitoring.

23. A system as set forth in claim 22, wherein the means for providing includes means for analyzing the input from the means for monitoring.

24. A system as set forth in claim 22, wherein the means for analyzing includes means for identifying a transition from an active stage of carbon dioxide production to a stable stage of carbon dioxide production.

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